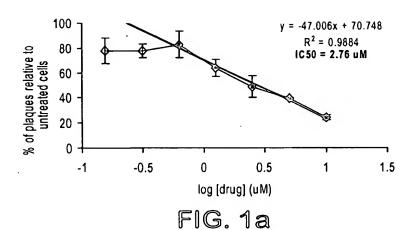
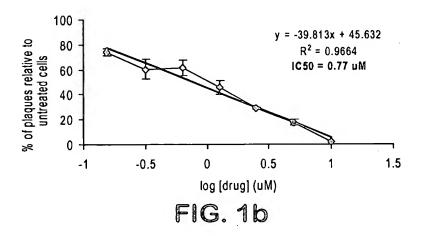


REP 1001 vs HSV-1



REP2001 vs HSV-1



REP3007 vs HSV-1

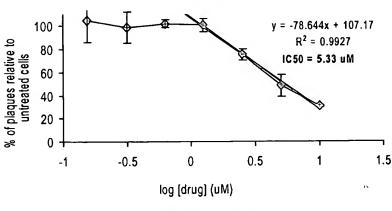


FIG. 1c

Oligo size versus IC50 (HSV-1)

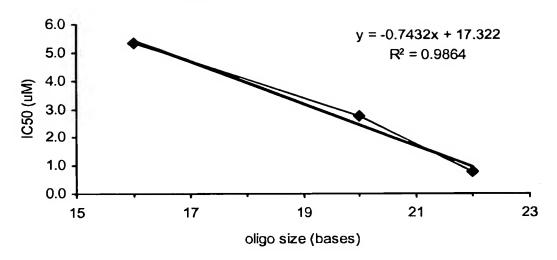
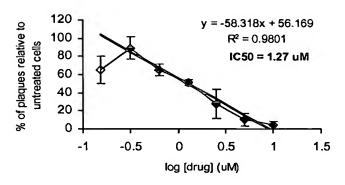


FIG. 2

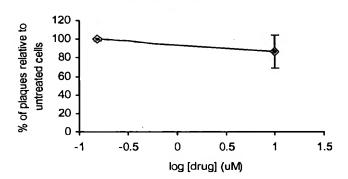
REP 2001 vs HSV-1

FIG. 3a



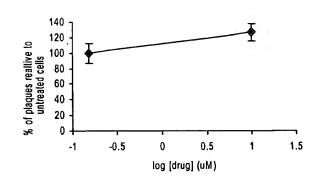
REP 2002 vs HSV-1

FIG. 3b



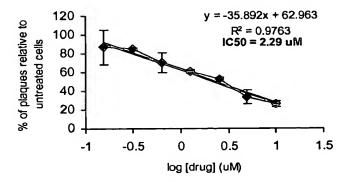
REP 2003 vs HSV-1

FIG. 3c



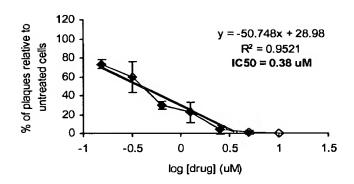
REP 2004 vs HSV-1

FIG. 3d



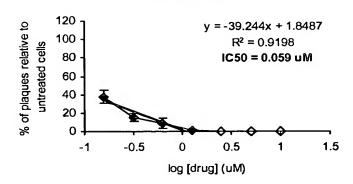
REP 2005 vs HSV-1

FIG. 3e



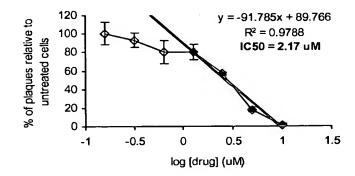
REP 2006 vs HSV-1

FIG. 3f



acyclovir vs HSV-1

FIG. 3g



Oligo size versus IC50 (HSV-1)

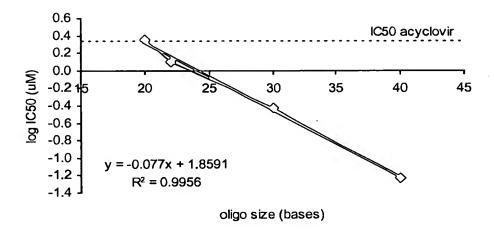


FIG. 4

REP 2003 vs HSV-1

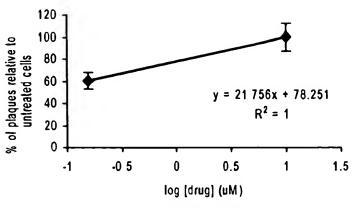


FIG. 5a

REP 2009 vs HSV-1

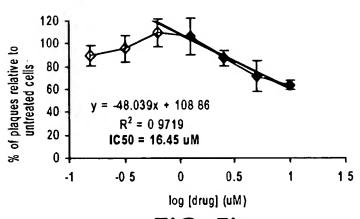
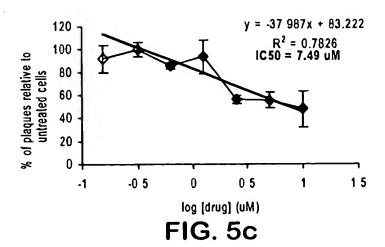


FIG. 5b

REP 2010 vs HSV-1



REP 2011 vs HSV-1

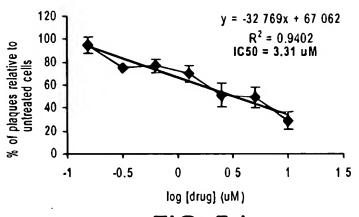
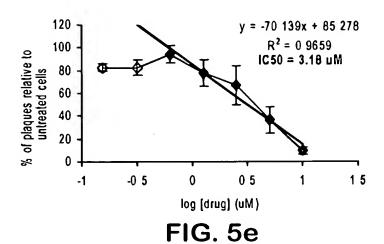


FIG. 5d

REP 2012 vs HSV-1



REP 2004 vs KOS

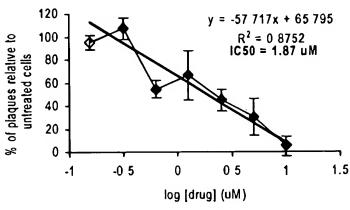


FIG. 5f

REP 2006 vs HSV-1

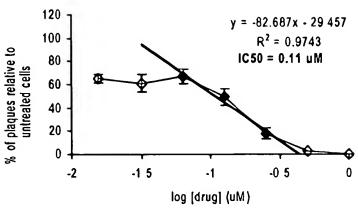


FIG. 5g

REP 2007 vs HSV-1

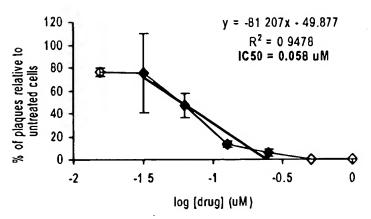


FIG. 5h

REP 2008 vs KOS

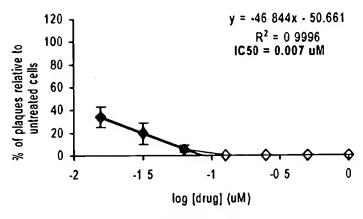


FIG. 5i

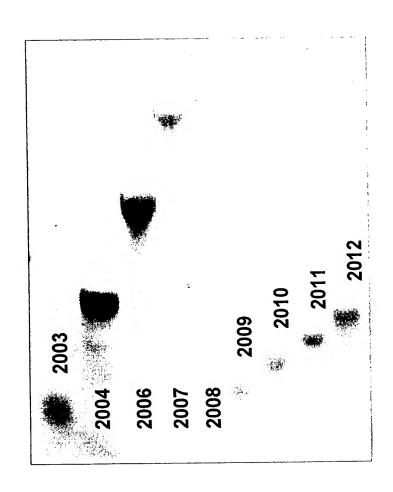


FIG. 6

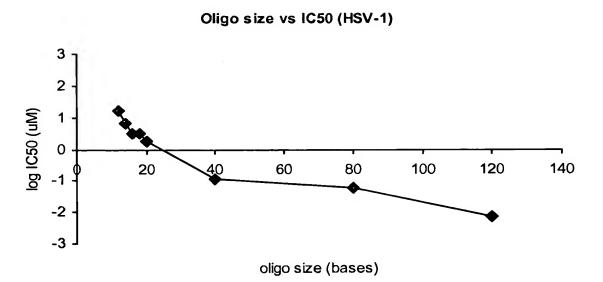
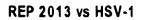
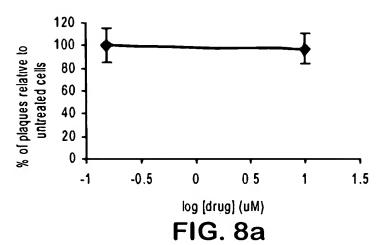


FIG. 7





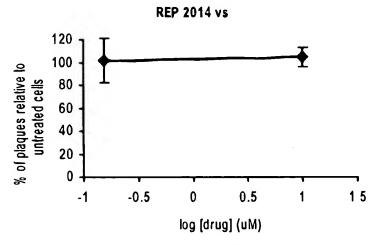


FIG. 8b

REP 2015 vs HSV-1

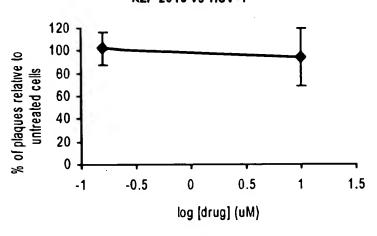


FIG. 8c

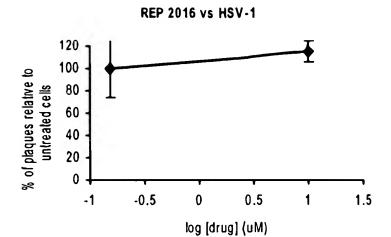


FIG. 8d



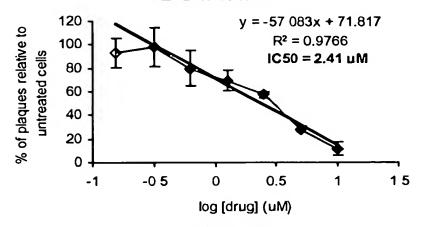


FIG. 8e

REP 2018 vs HSV-1

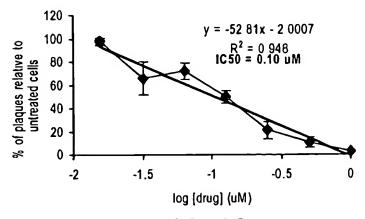


FIG. 8f

REP 2019 vs HSV-1

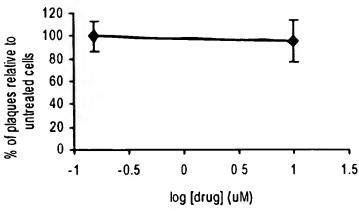


FIG. 8g

REP2020 vs HSV-1

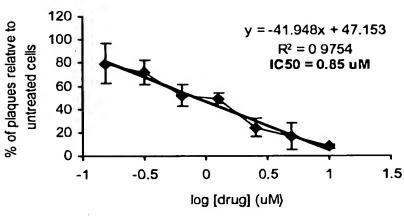


FIG. 8h

REP 2121 vs HSV-1

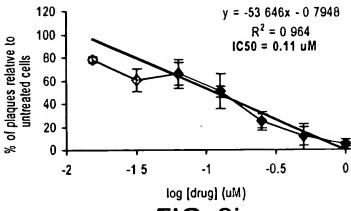


FIG. 8i

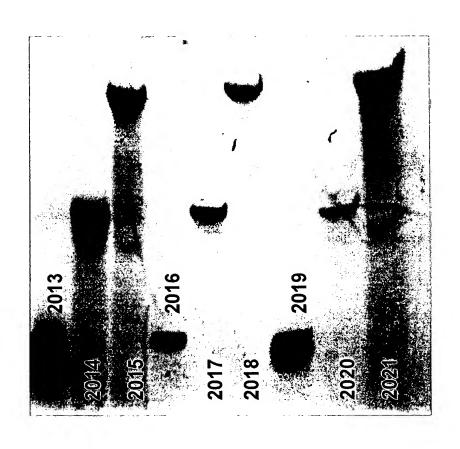


FIG. 9

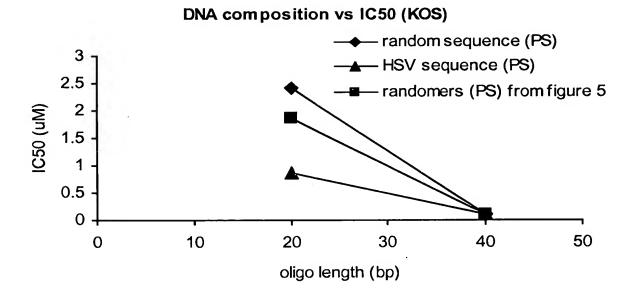


FIG. 10

REP 2024 vs HSV-1

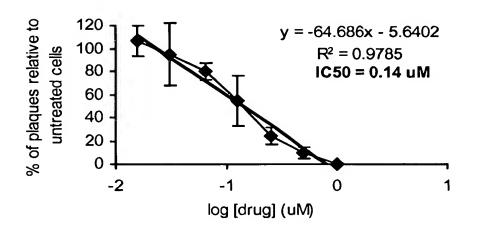


FIG. 11a

REP 2026 vs HSV-1

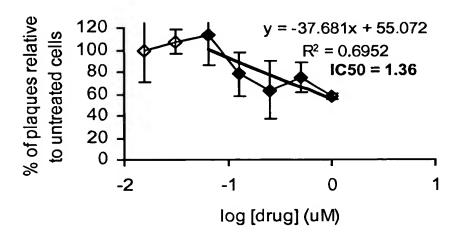


FIG. 11b

REP 2059 vs HSV-1

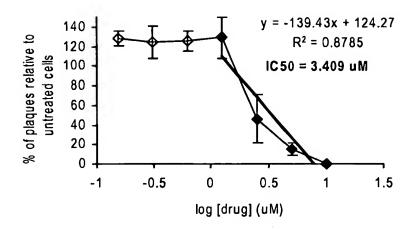


FIG. 11c

REP 2060 vs HSV-1

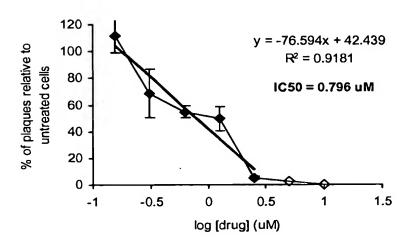
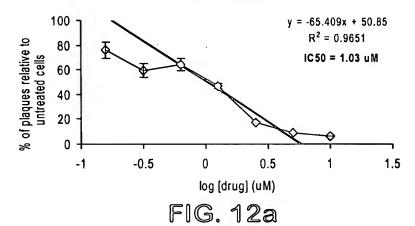
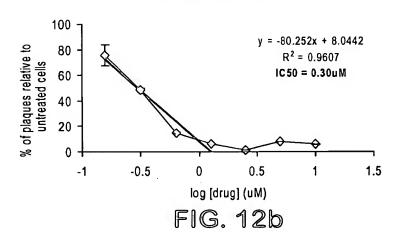


FIG. 11d

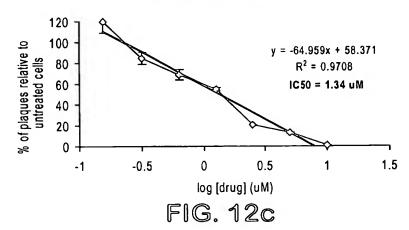




REP2001 vs HSV-2



REP3007 vs HSV-2



Oligo size versus IC50 (HSV-2)

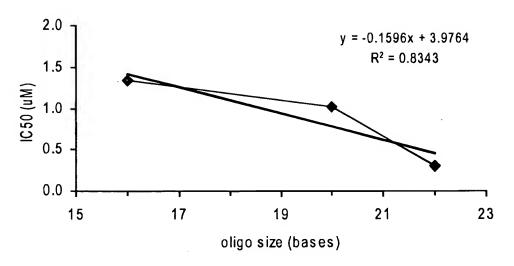


FIG. 13

REP 2001 vs HSV-2 **12**0 y = -61.449x + 28.078% of plaques relative to $R^2 = 0.9625$ 100 untreated cells IC50 = 0.439 uM80 FIG. 14a 60 40 20 0 0.5 -1 -0.5 0 1.5 log [drug] (uM)



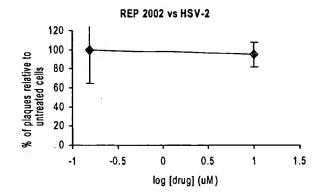


FIG. 14c

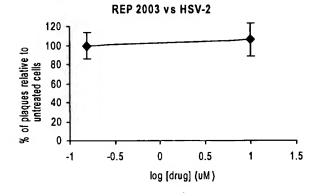
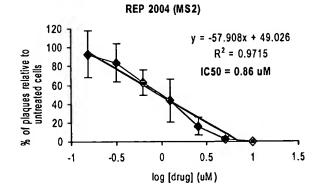
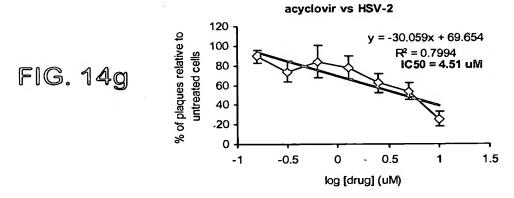


FIG. 14d



REP 2005 vs HSV-2 120 % of plaques relative to $\dot{y} = -120.5x - 51.631$ 100 untreated cells $R^2 = 1$ FIG. 14e 80 IC50 = 0.14 uM 60 40 20 0 0 0.5 1.5 -0.5 -1 log [drug] (uM) REP 2006 vs HSV-2 120 y = -34.813x - 16.687 $R^2 = 1$ IC50 = 0.012 uM 100 % of plaques relative to untreated cells 80 FIG. 14f 60 40 20 0 + 0.5 1.5 -0.5 0 -1 log [drug] (uM)



Oligo size versus IC50 (HSV-2)

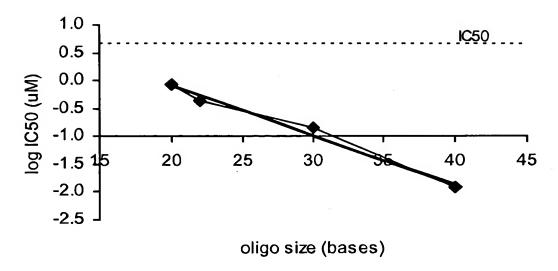
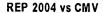


FIG. 15



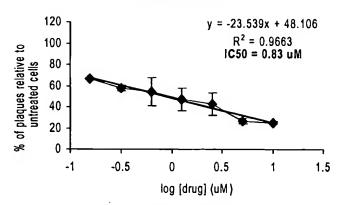


FIG. 16a

REP 2006 vs CMV

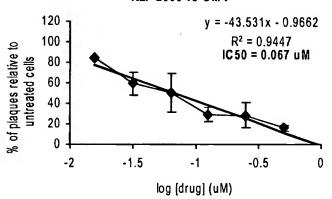


FIG. 16b

Oligo size vs IC50 (CMV)

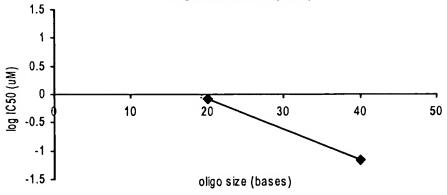


FIG. 16c

Gancyclovir vs CMV

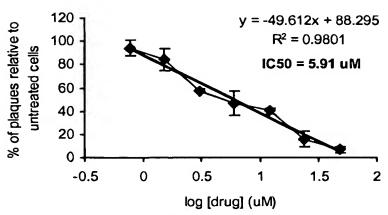


FIG. 17a

Foscarnet vs CMV

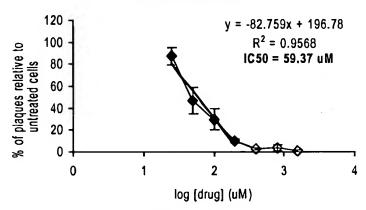


FIG. 17b

Cidofovir vs CMV

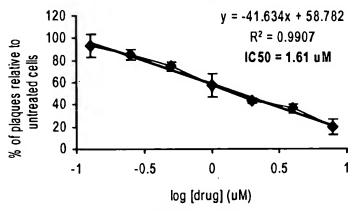
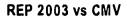


FIG. 17c



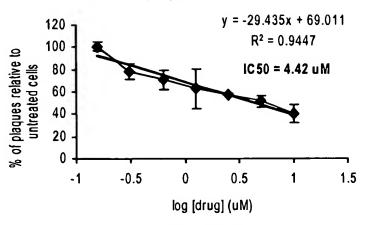
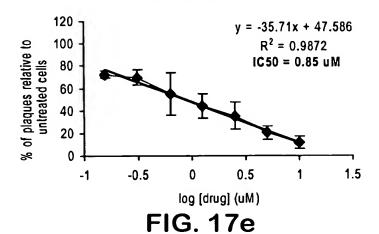
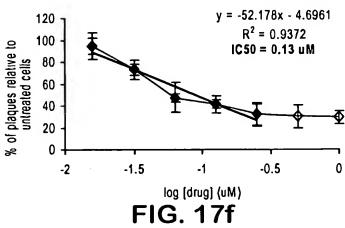


FIG. 17d

REP 2004 vs CMV



REP 2006 vs CMV





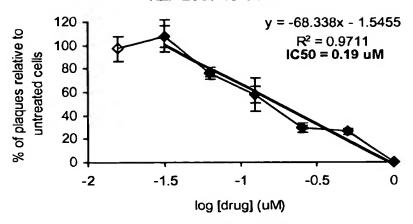


FIG. 17g

REP 2036 (Vitravene) vs CMV

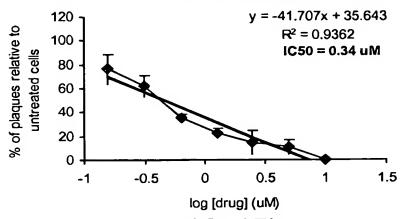


FIG. 17h

REP 2036 (commercial Vitravene) vs CMV

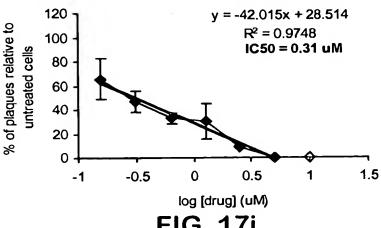


FIG. 17i

Oligo size vs IC50 (CMV)

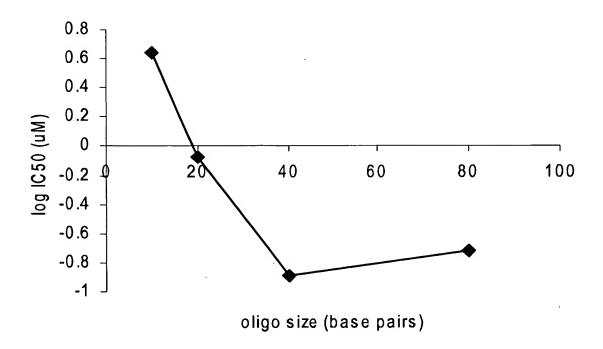


FIG. 18

REP 2004 vs HIV

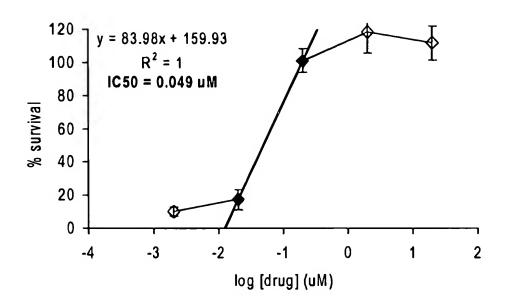


FIG. 19a

REP 2006 vs HIV

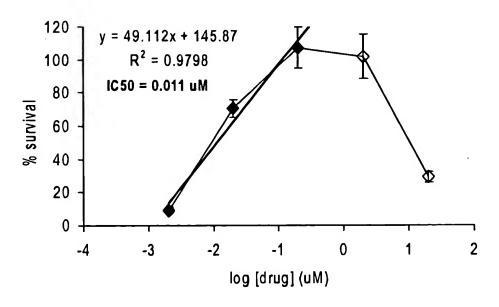


FIG. 19b

REP 2004 vs MT4 lymphocytes

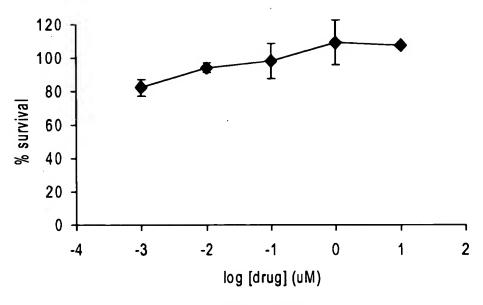


FIG. 19c

REP 2006 vs MT4 lymphocytes

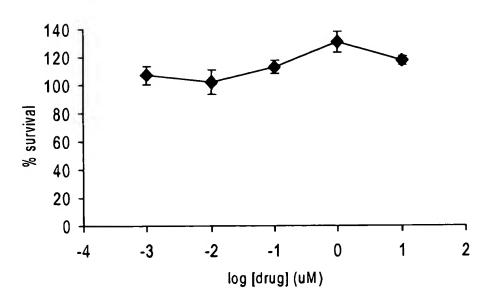


FIG. 19d

Oligo size vs IC50 (HIV)

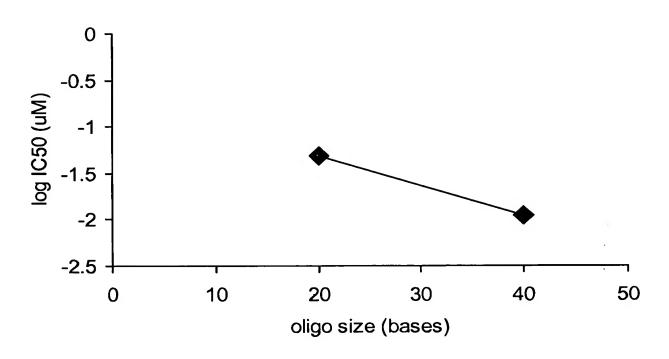


FIG. 20

Amprenavir (Agenerase™)

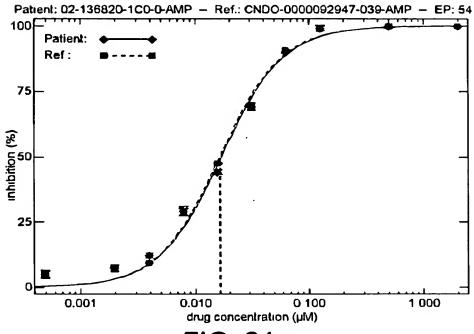


FIG. 21a

7.

Indinavir (Crixivan™)

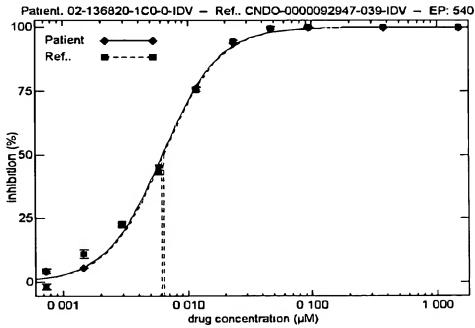


FIG. 21b

Lopinavir (Kaletra™)

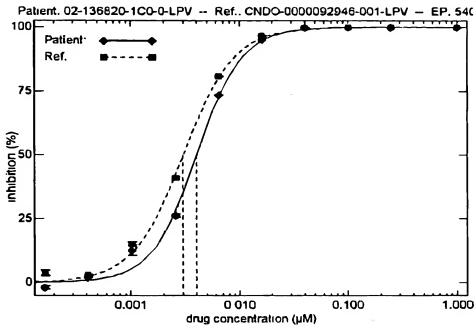


FIG. 21c

Saquinavir (Fortovase™)

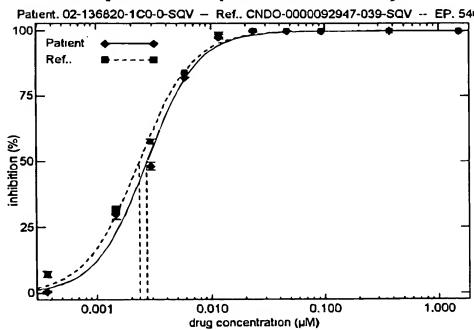


FIG. 21d

REP 2003

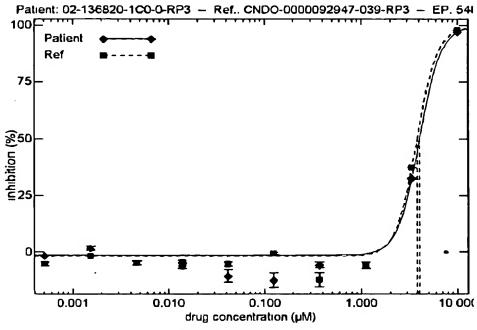


FIG. 21e

REP 2004

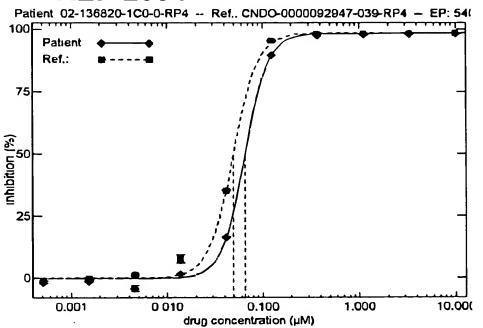


FIG. 21f

REP 2006

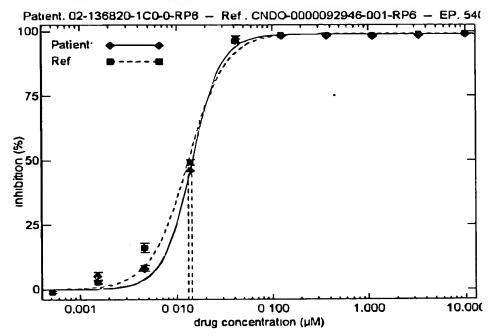


FIG. 21g

REP 2007

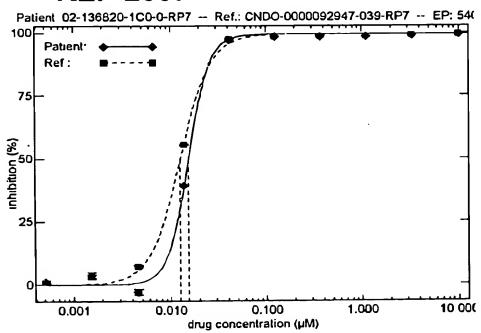


FIG. 21h

Drug	IC50 (uM)
REP 2003	4.01
REP 2004	0.065
REP 2006	0.014
REP 2007	0.015
Amprenavir	0.016
Indinavir	0.006
Lopinavir	0.004
Saquinavir	0.003

FIG. 22a



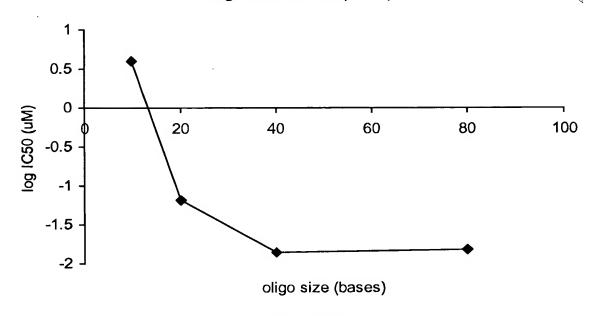


FIG. 22b

Amprenavir (Agenerase™)

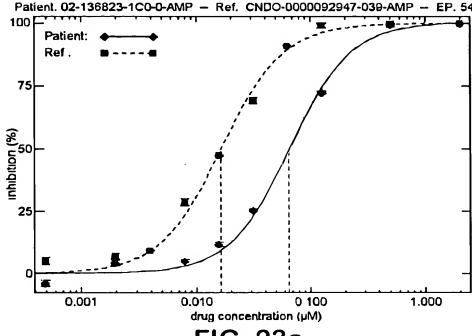


FIG. 23a

Indinavir (Crixivan™)

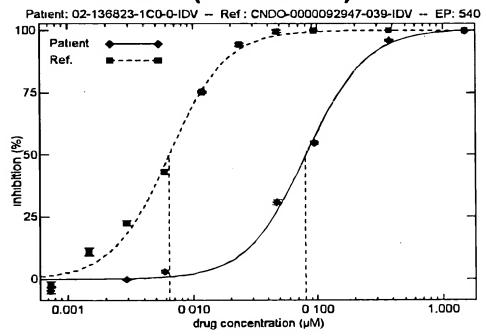


FIG. 23b

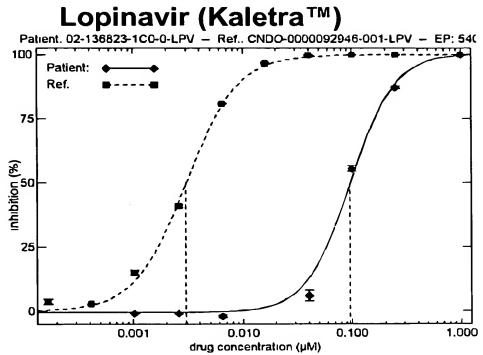


FIG. 23c

Saquinavir (Fortovase™)

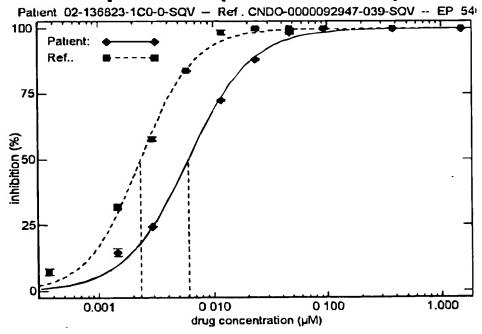


FIG. 23d

REP 2003

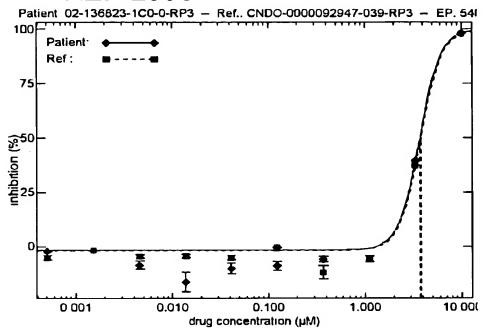


FIG. 23e

REP 2004

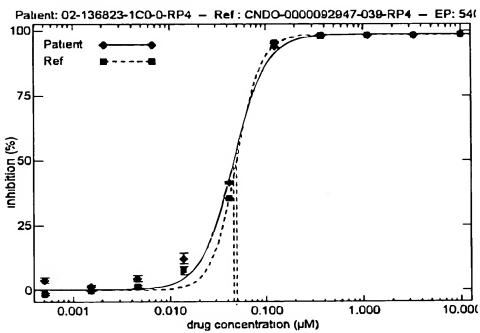
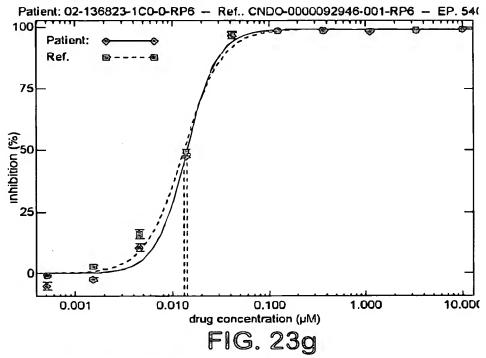


FIG. 23f

REP 2006



REP 2007

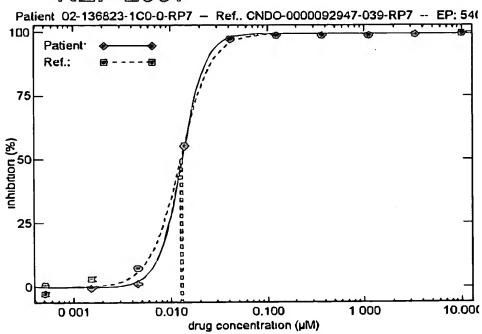


FIG. 23h

	IC50 (uM)		Fold change
Drug	HIV-1 NL4-3	HIV-1 MRDC4	in IC50
REP 2003	4.01	3.69	0.92
REP 2004	0.065	0.046	0.71
REP 2006	0.014	0.014	1.00
REP 2007	0.015	0.013	0.87
Amprenavir	0.017	0.065	3.82
Indinavir	0.006	0.08	13.33
Lopinavir	0.004	0.096	24.00
Saquinavir	0.003	0.006	2.00

FIG. 24

REP 2004 vs RSV

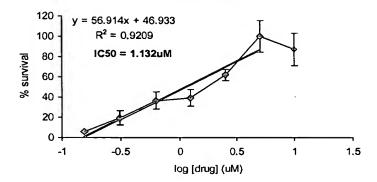


FIG. 25a

REP 2006 vs RSV

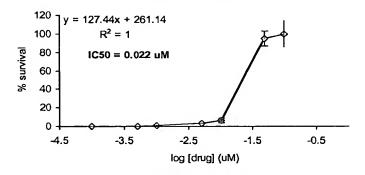


FIG. 25b

REP 2007 vs RSV

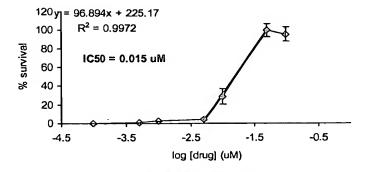


FIG. 25c

Ribavirin vs RSV

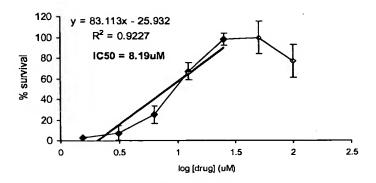


FIG. 25d

REP 2004 vs Hep2 EC cells

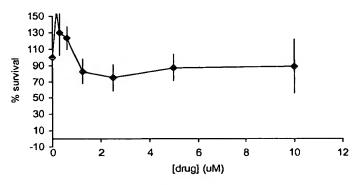


FIG. 25e

REP 2006 vs Hep2 EC cells

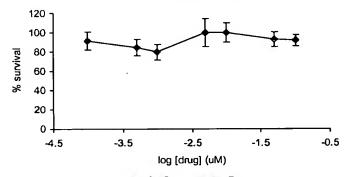


FIG. 25f

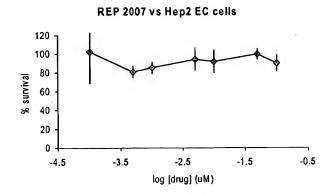
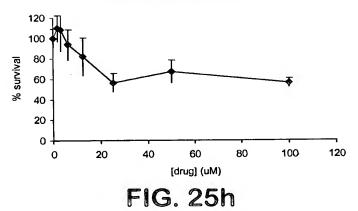


FIG. 25g

Ribavirin vs Hep2 EC cells



Oligo size vs IC50 (RSV)

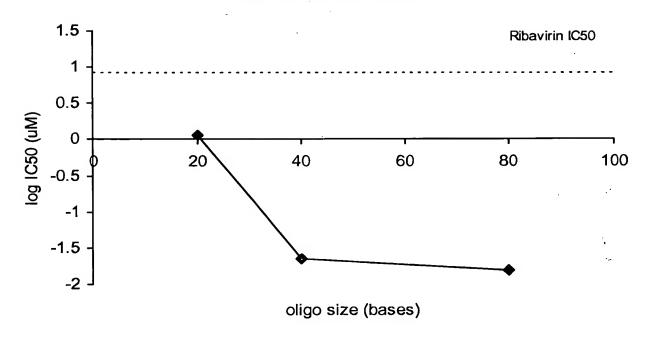
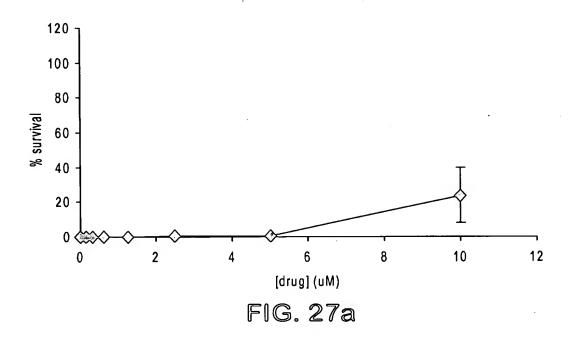
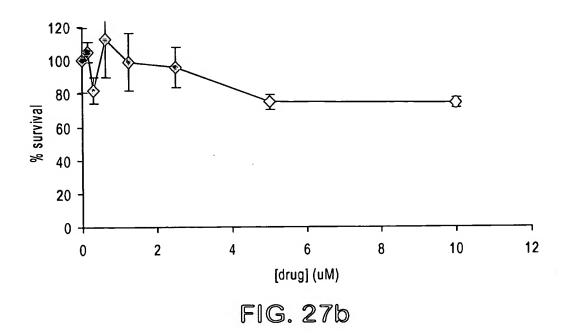


FIG. 26

REP 2006 vs COX B2



REP 2006 vs LLC-MK2 cells



FP Serum Interaction test with PS-ODN randomers of increasing size baseline (unbound bait): 86mP

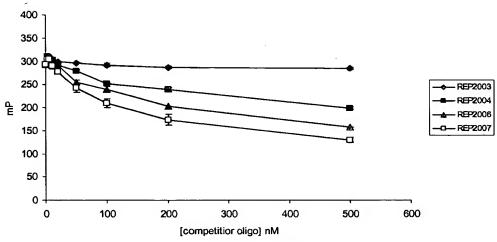
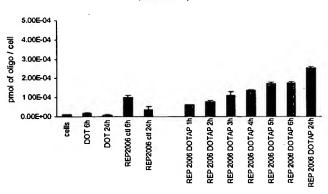


FIG. 28a

REP2006 delivery with DOTAP in 293A cells over time (50% serum)



DTAP 2h

DTAP 4h

DTAP 6h

TAP 24h

TAP 24h

TAP 24h

REP 2006

. 250

200

100 50

≘ 150

FIG. 28b

FIG. 28d

0 2

REP 2006

æ

ul of DOTAP used for

REP 2006

Competition test with REP 2006 encapsulated with DOTAP

REP2006 delivery with cytolectin in 293A cells over time (50% serum)

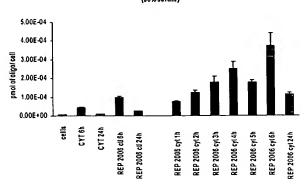


FIG. 28c

Competition test with REP 2006 encapsulated with Cytofectin

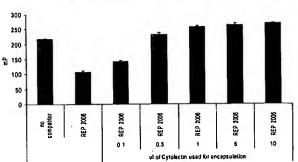
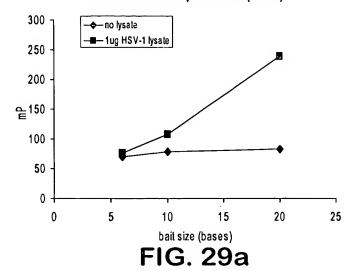


FIG. 28e

Bait size versus bait polarization (HSV-1)



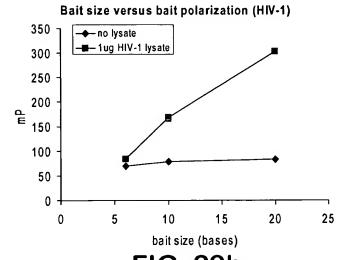


FIG. 29b



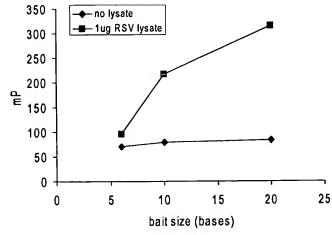


FIG. 29c

Oligo competitor size vs bait competition (HSV-1)

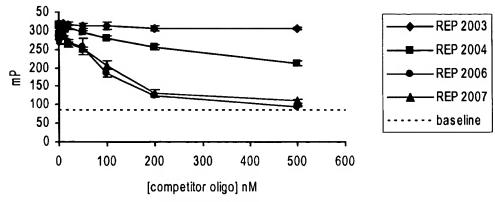


FIG. 30a

Oligo competitor size vs bait competition (HIV-1)

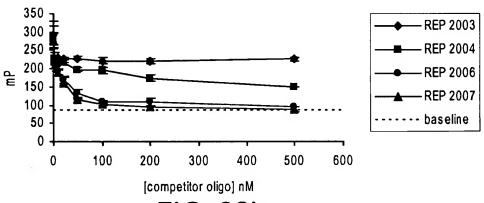


FIG. 30b

Oligo competitor size vs bait competition (RSV)

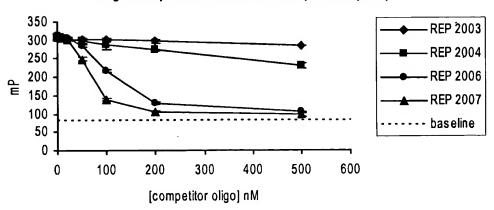


FIG. 30c

p24 and gp41 binding to HIV lysate

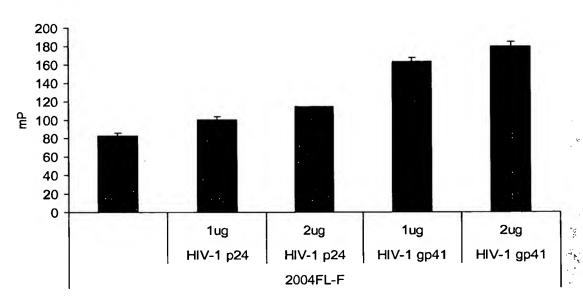


FIG. 31

Bait size vs p24 binding

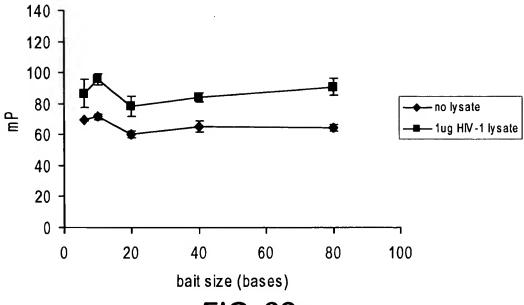


FIG. 32a

Bait size vs gp41 binding

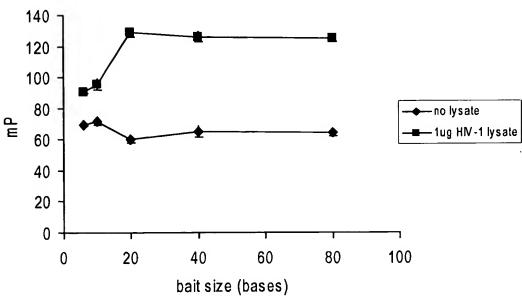
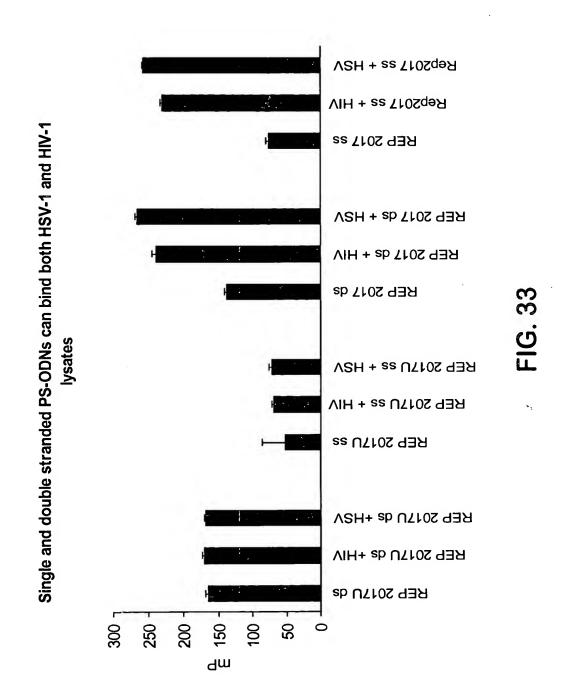


FIG. 32b



Cellular Uptake of REP 2004-FL

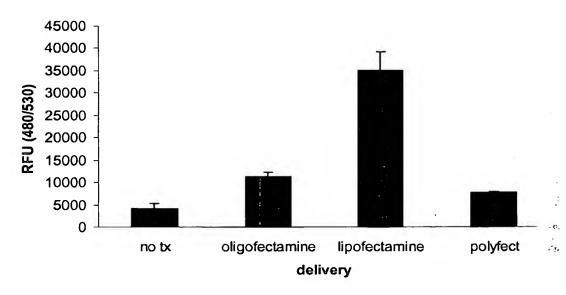


FIG. 34

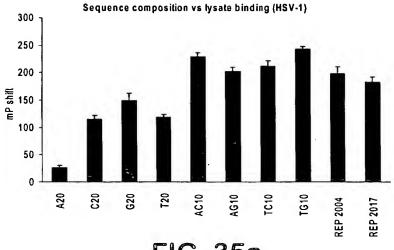
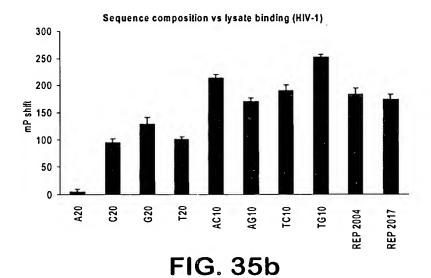


FIG. 35a



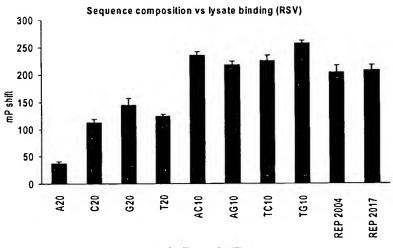


FIG. 35c

REPLICOR compounds versus Vaccinia

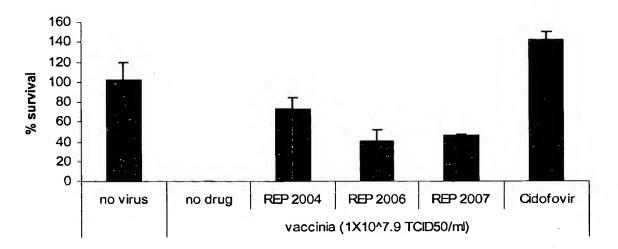


FIG. 36

SEQUENCE COMPOSITION VS ANTI-HSV EFFICACY

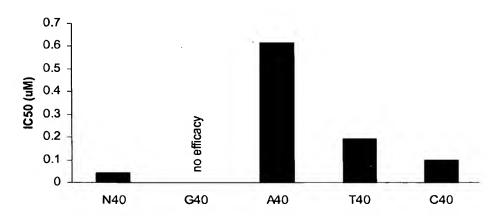


FIG. 37a

Effect of sequence composition on efficiacy against HSV-1

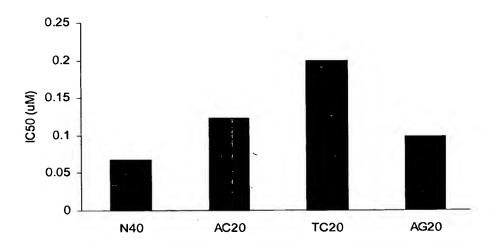


FIG. 37b